

Fusion 360: Simulation for Designers (S4D) and Calculators

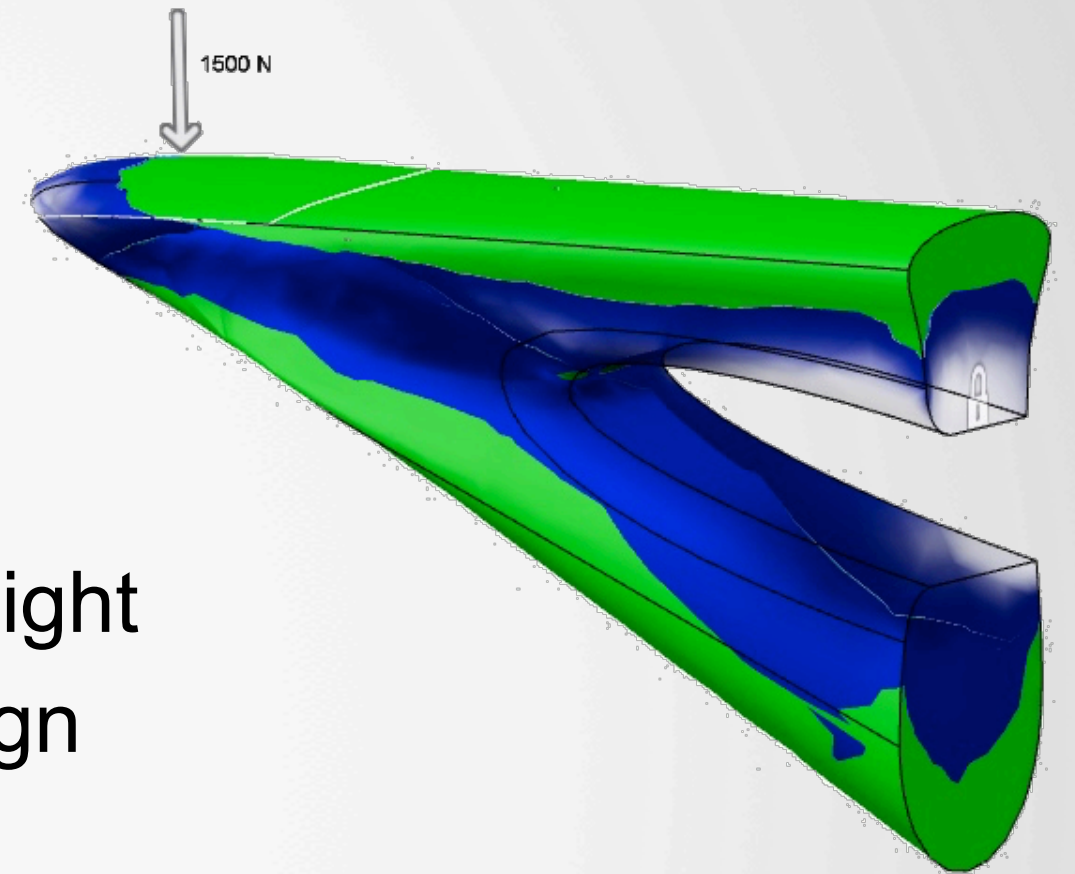
Vaclav Prchlik

Software Development Manager

Class summary

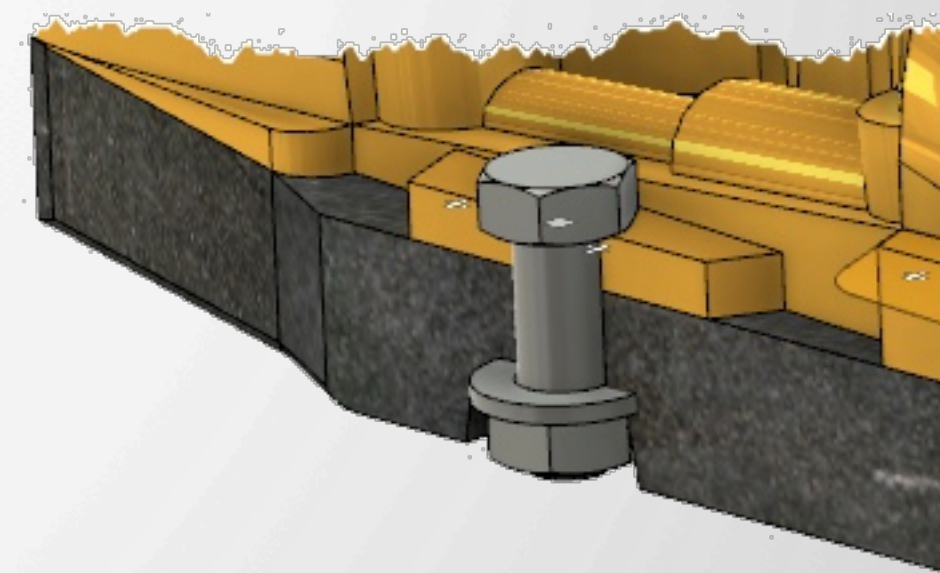
Simulation for Designers (S4D)

- No need to be a simulation expert
- S4D will guide you to the right design decisions, improve your product functionality, and decrease weight
- You will learn how easily you can improve your design with a 1-Click Solution

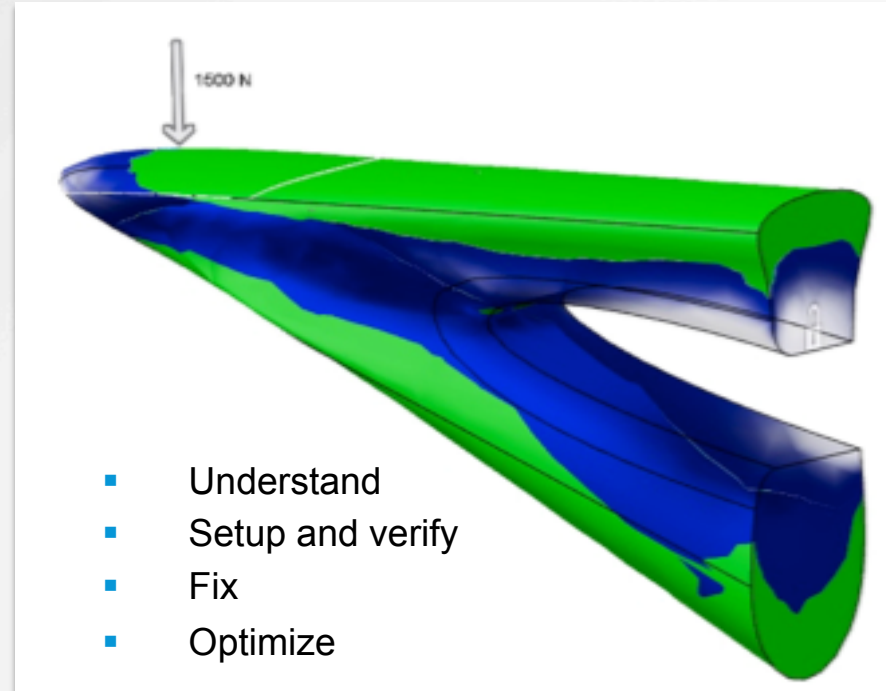


Bolted Connection for Fusion

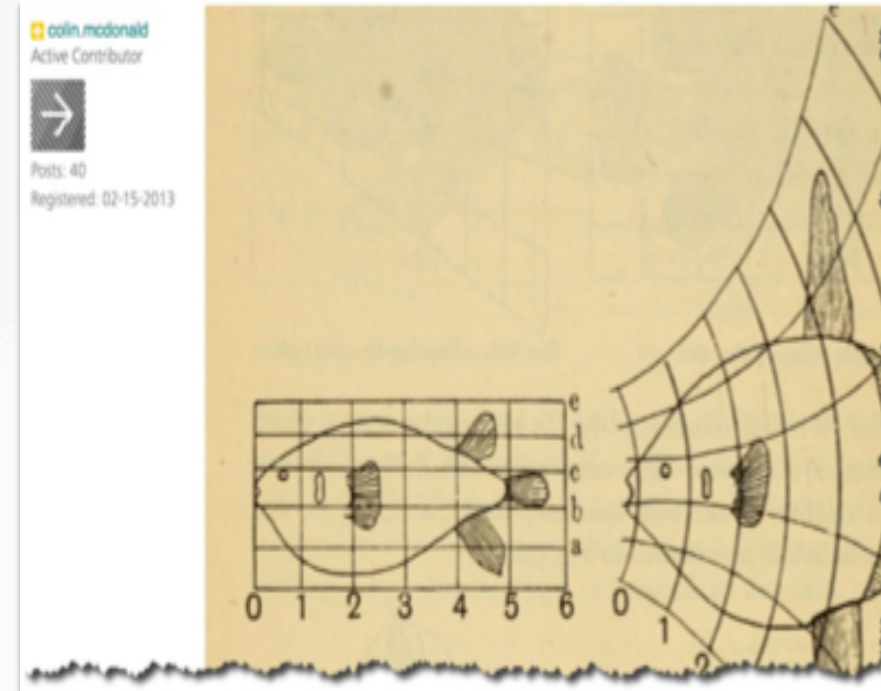
- Quickly generate right Bolt, Washer, Nut and Holes



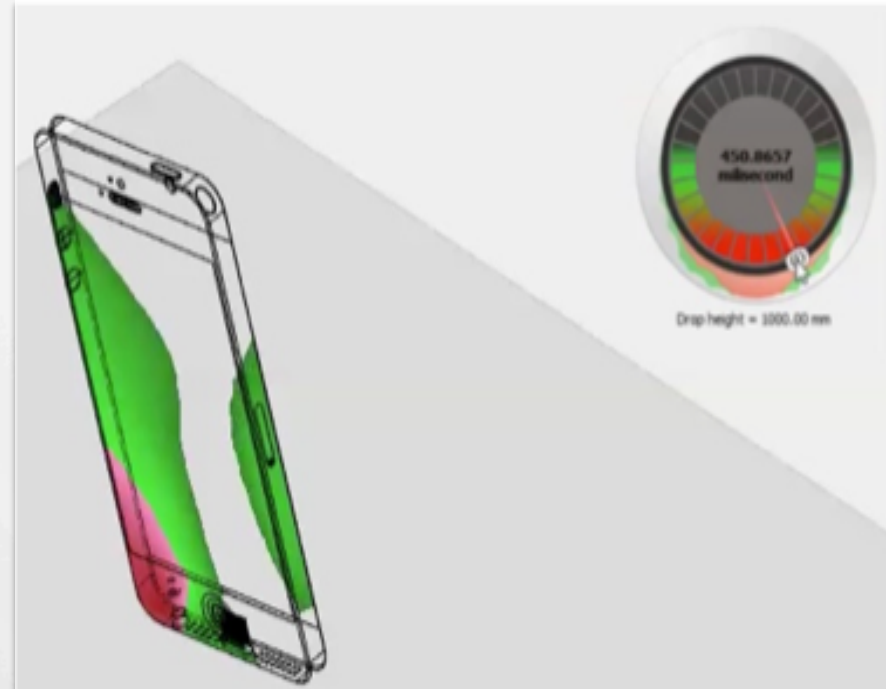
Simulation for Designers



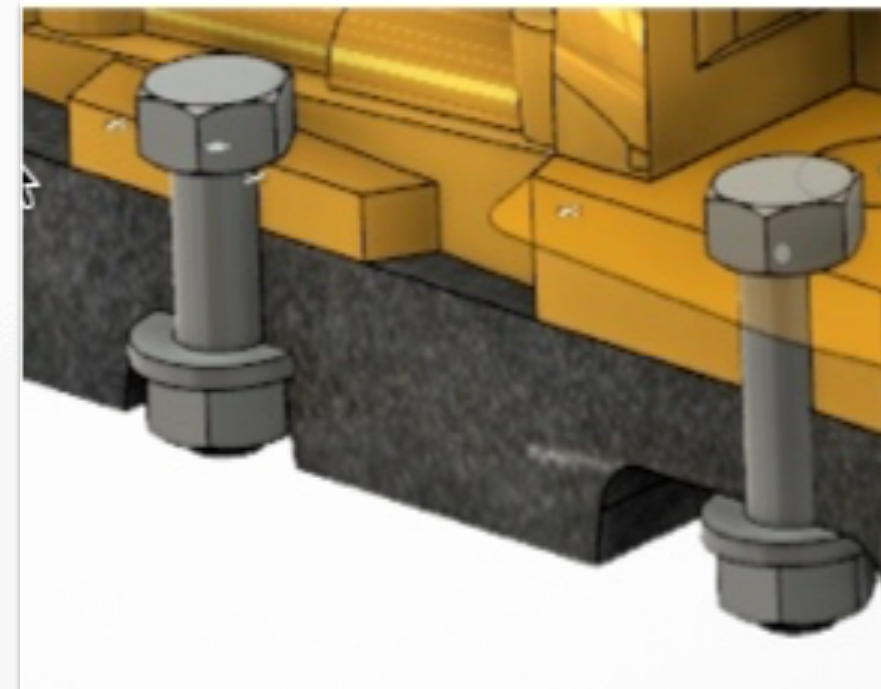
Autodesk Community



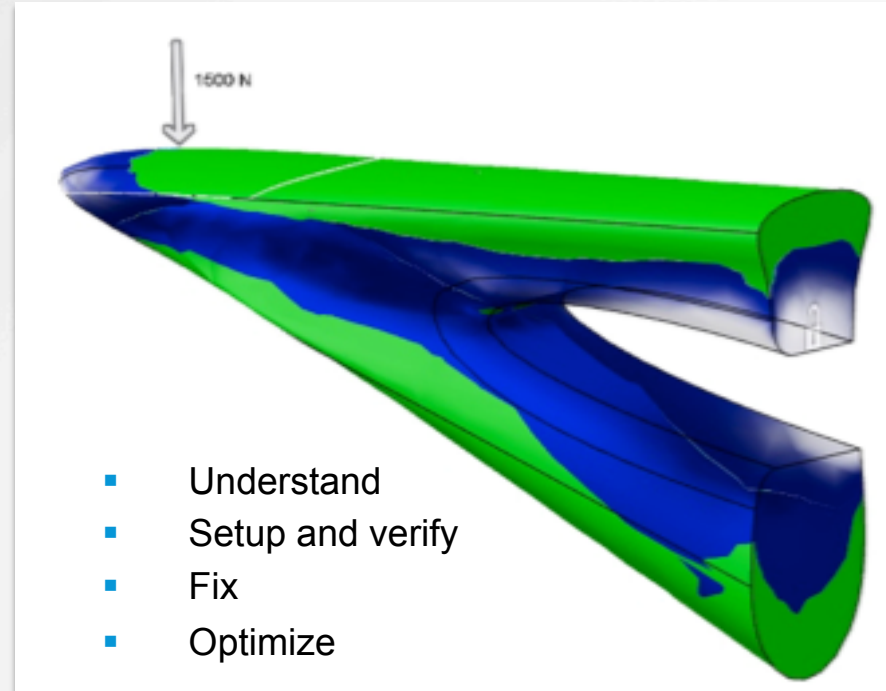
Drop Test



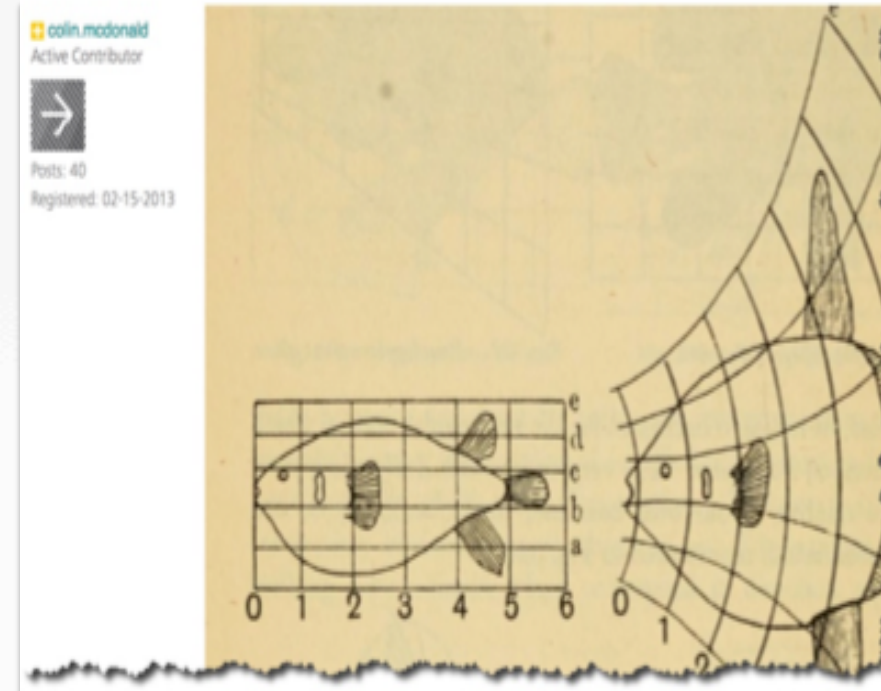
Bolted Connection



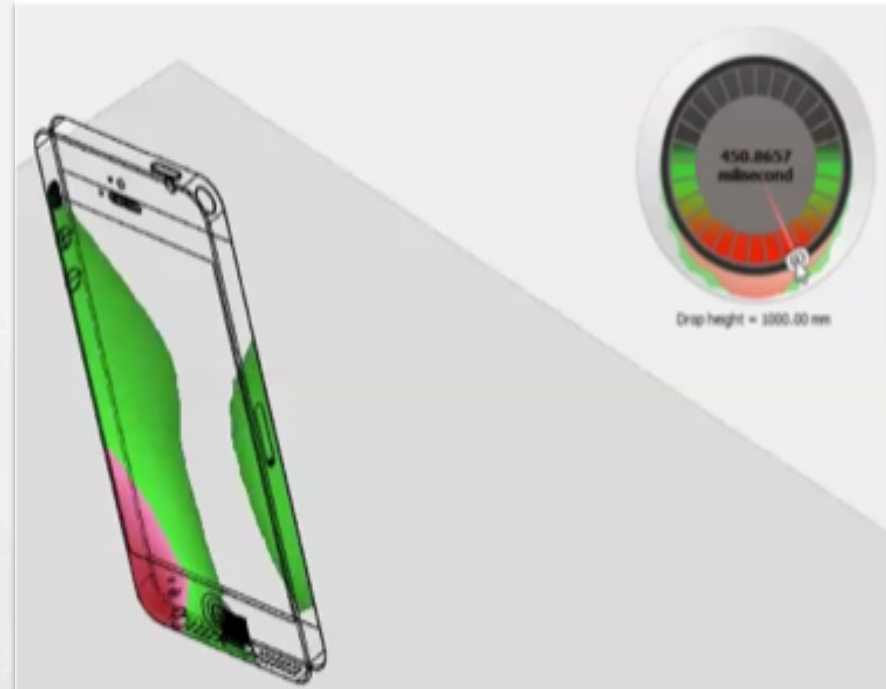
Simulation for Designers



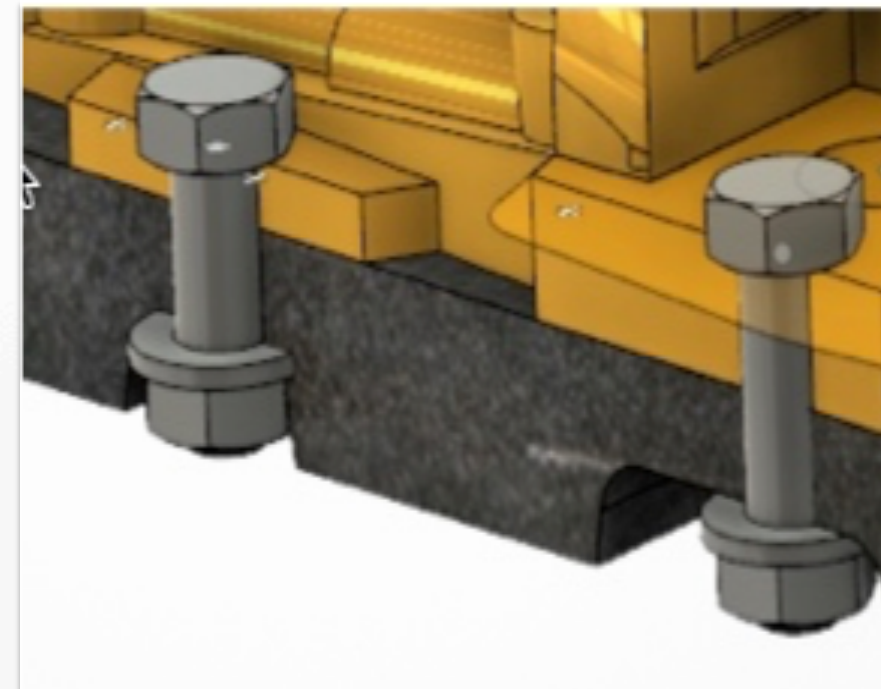
Autodesk Community



Drop Test



Bolted Connection



Concept of Simulation for Designers (S4D)

Every designer wants to create the right design that would work.

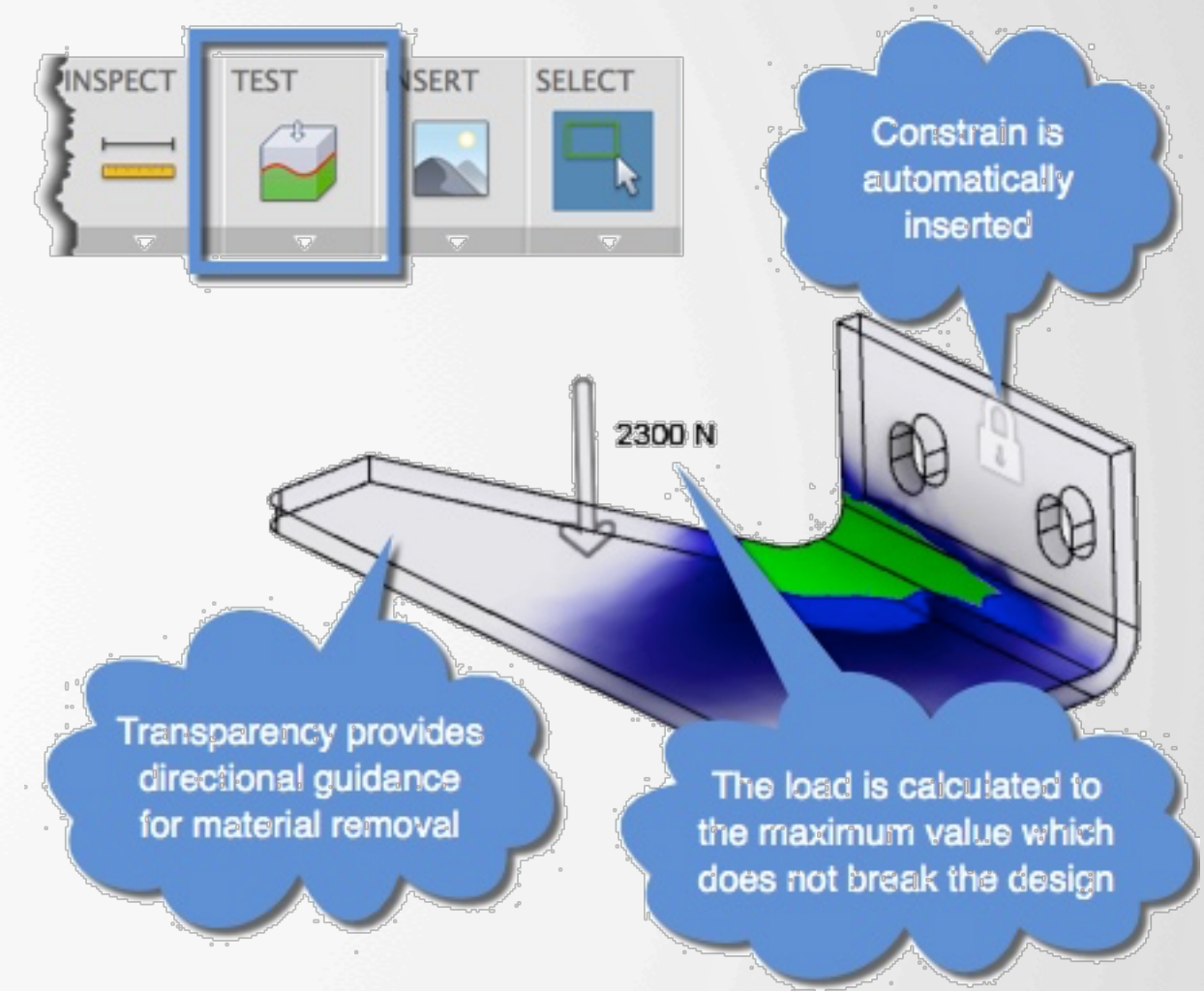
Common questions are:

- Is it likely to break?
- Where are critical areas of my model?
- Can I remove material?

Designers want answers but do not want to be Simulation experts.

Concept of Simulation for Designers (S4D)

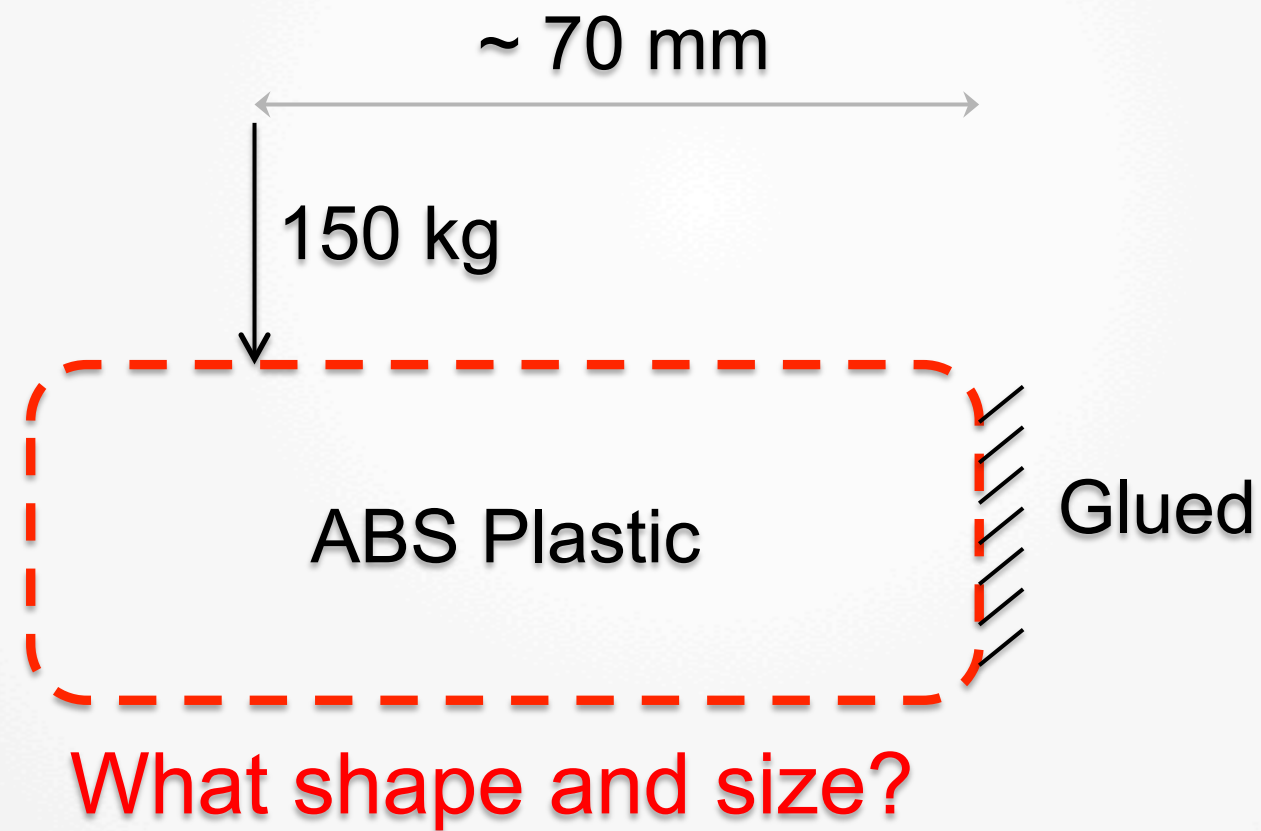
- **Start with Results**
- **Directional Guidance**
 - No numbers
- **Effortless**
 - No learning
 - 1-Click
- **Native Part of Fusion 360**
 - Designer workflow, not an LT version of analysts package

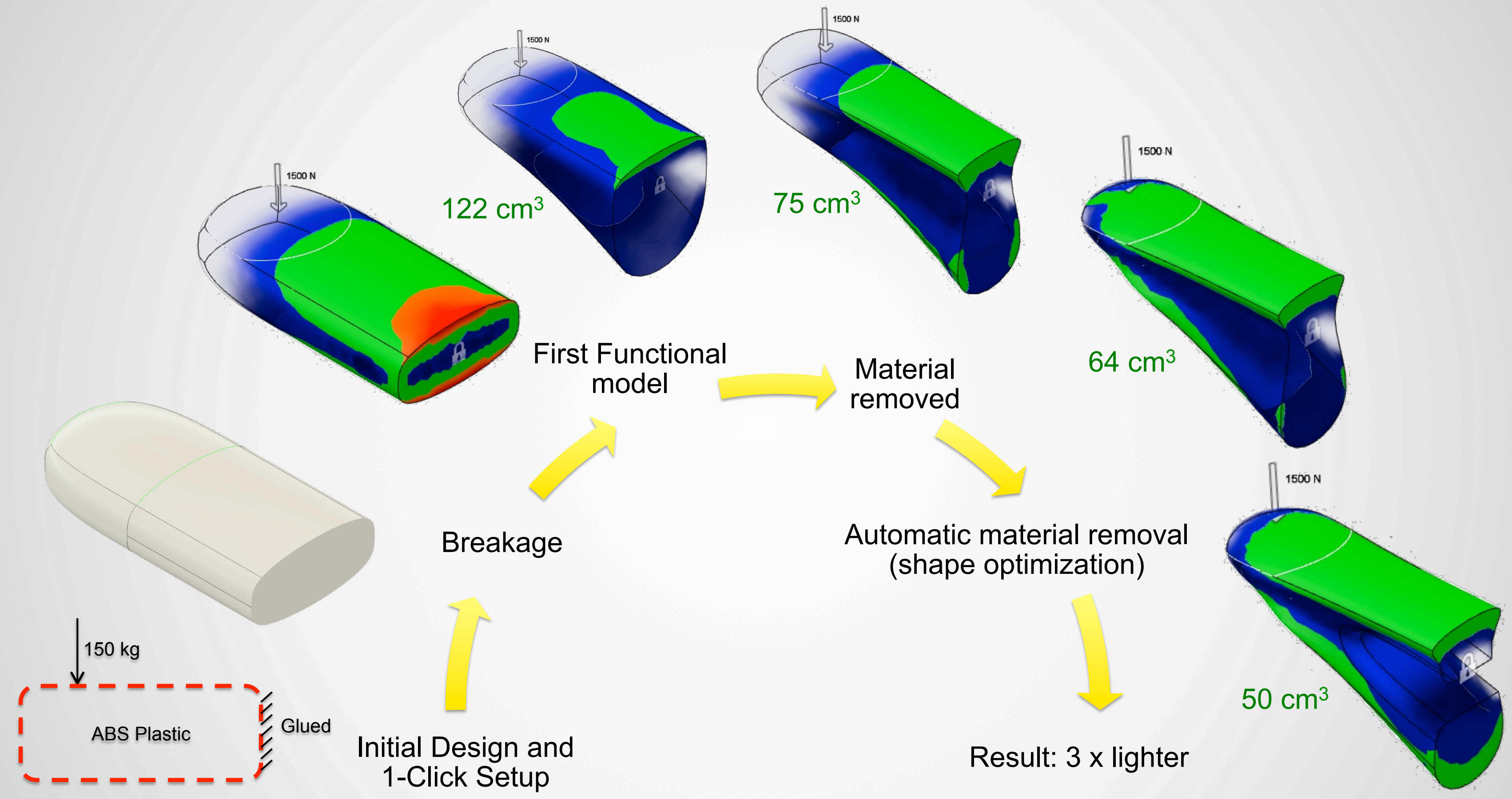


Step-by-step S4D

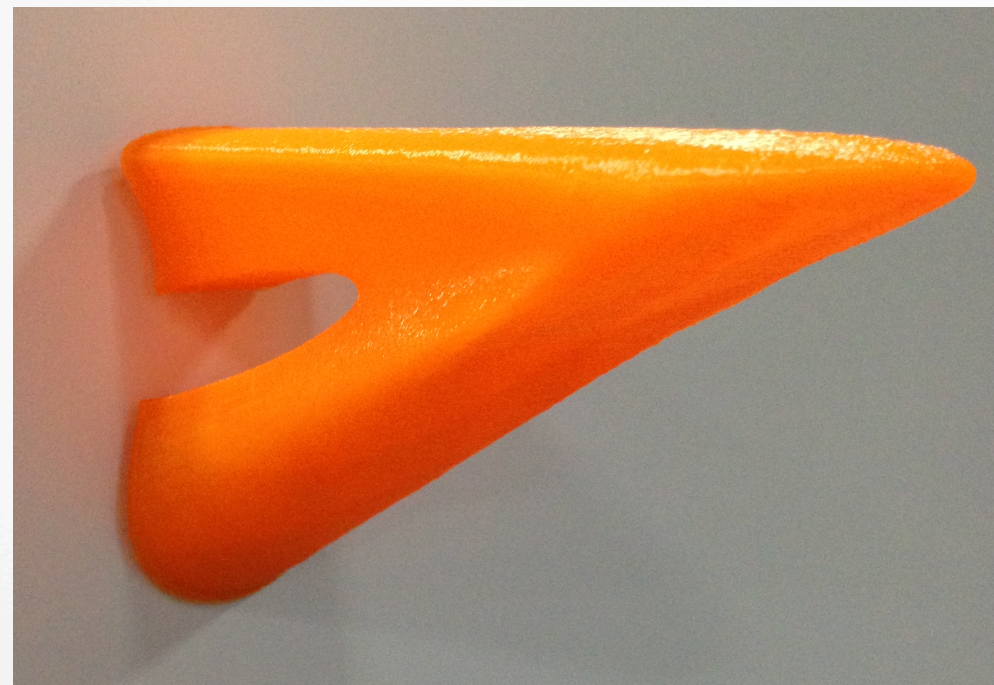
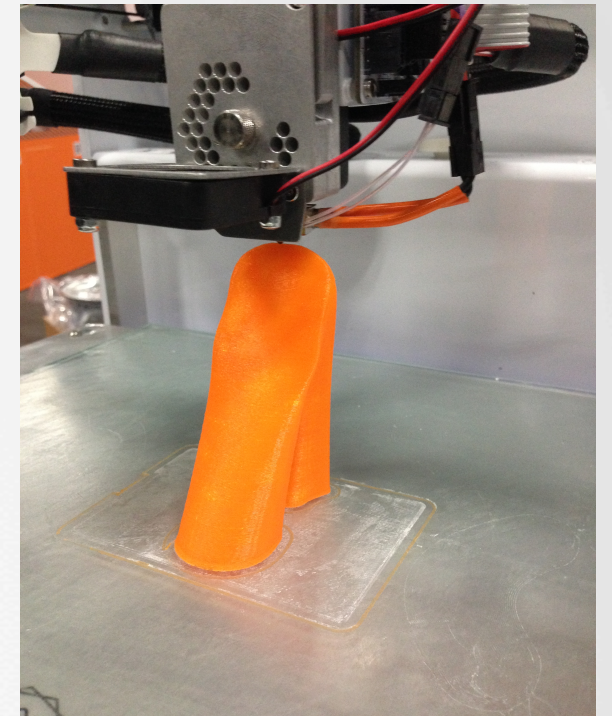
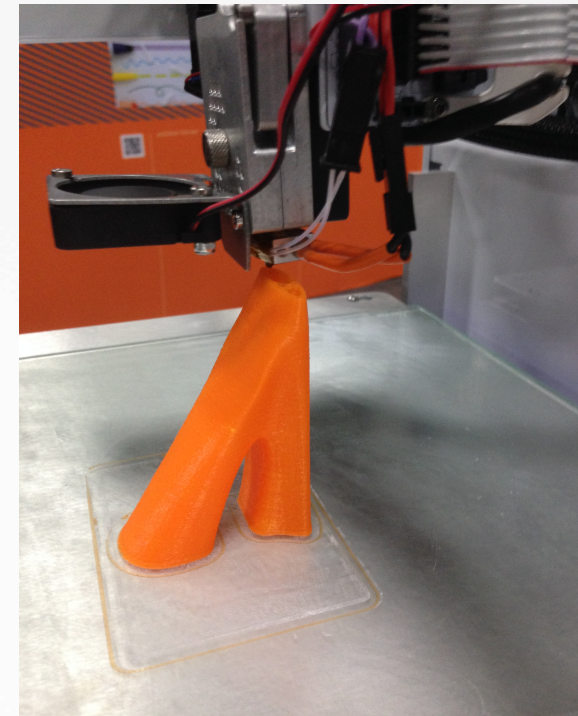
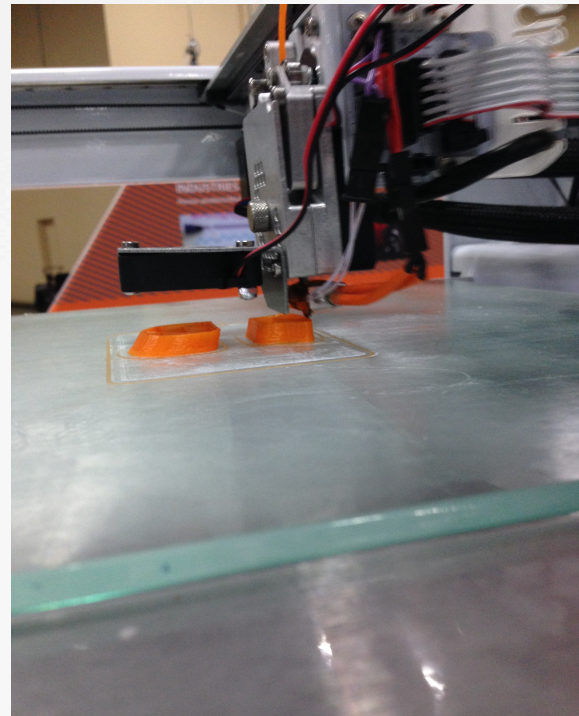
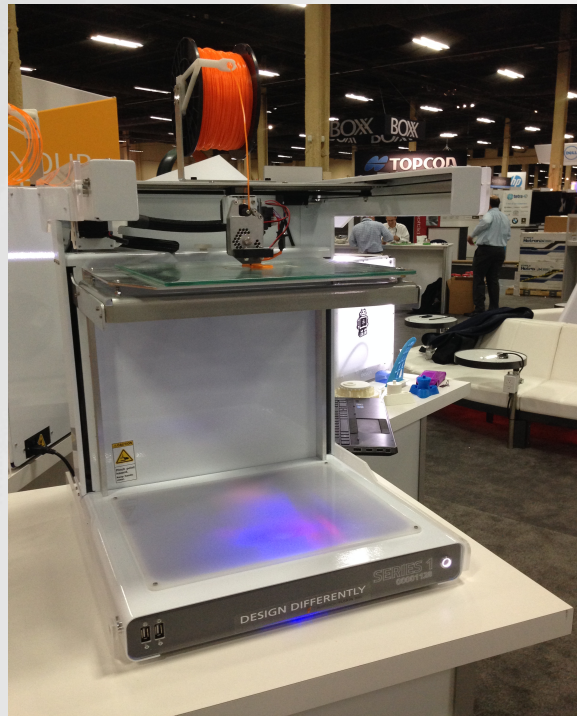
Goal:

- Design a simple holder from ABS plastic that would keep 150 kg
- Production method: 3D print





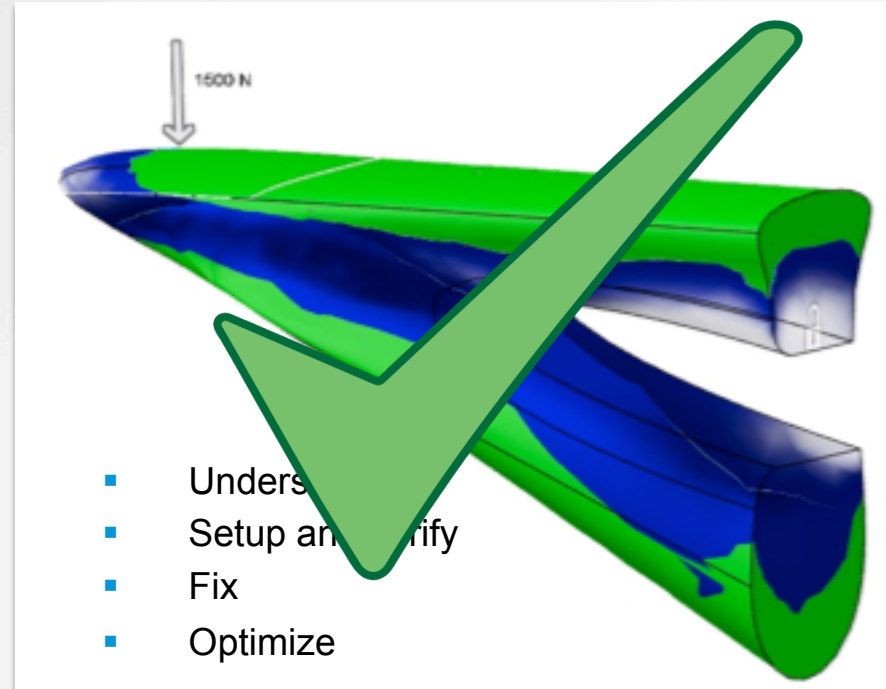
3D Print



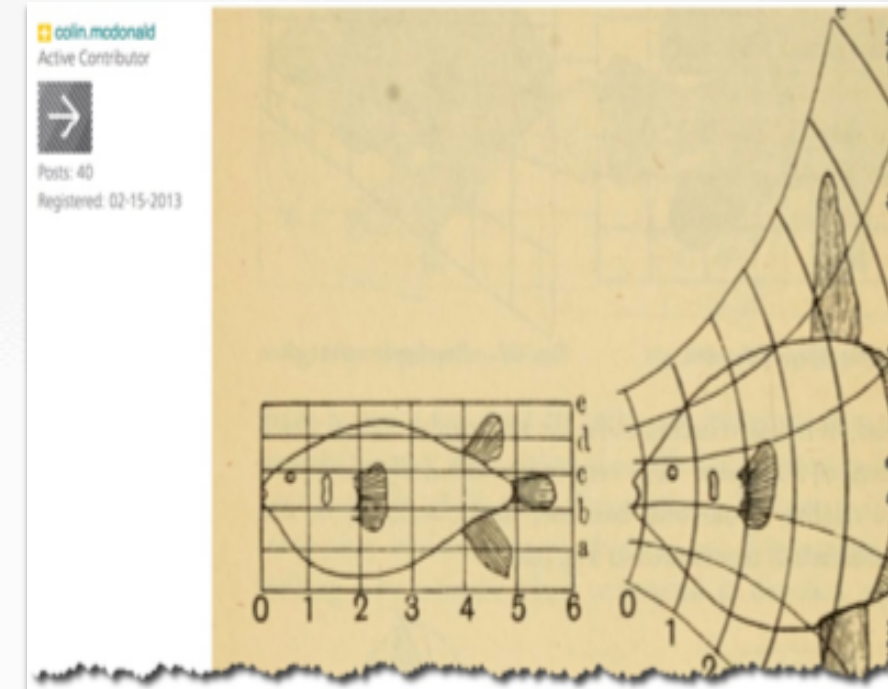


Questions?

Simulation for Designers



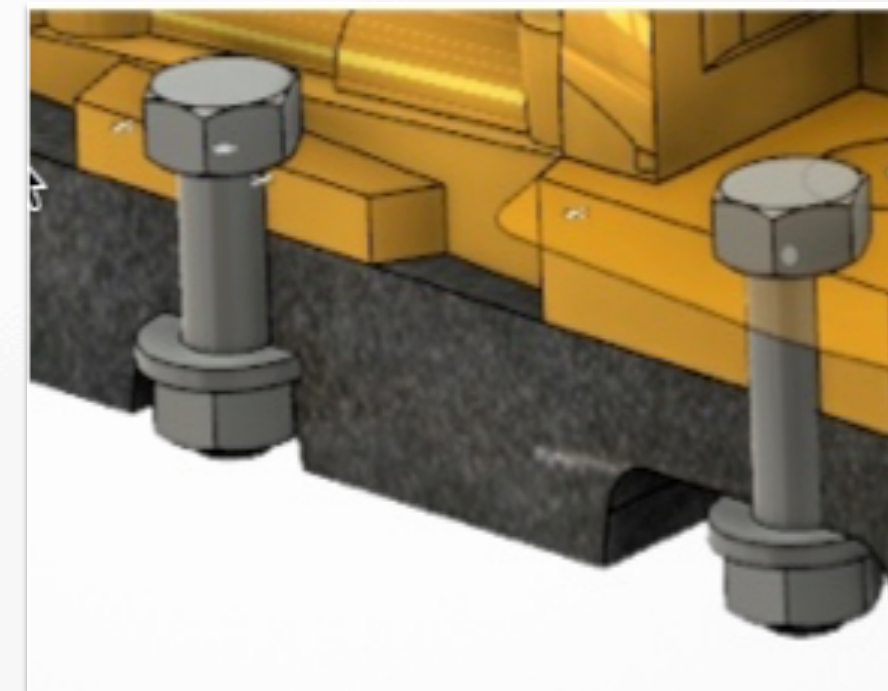
Autodesk Community



Drop Test

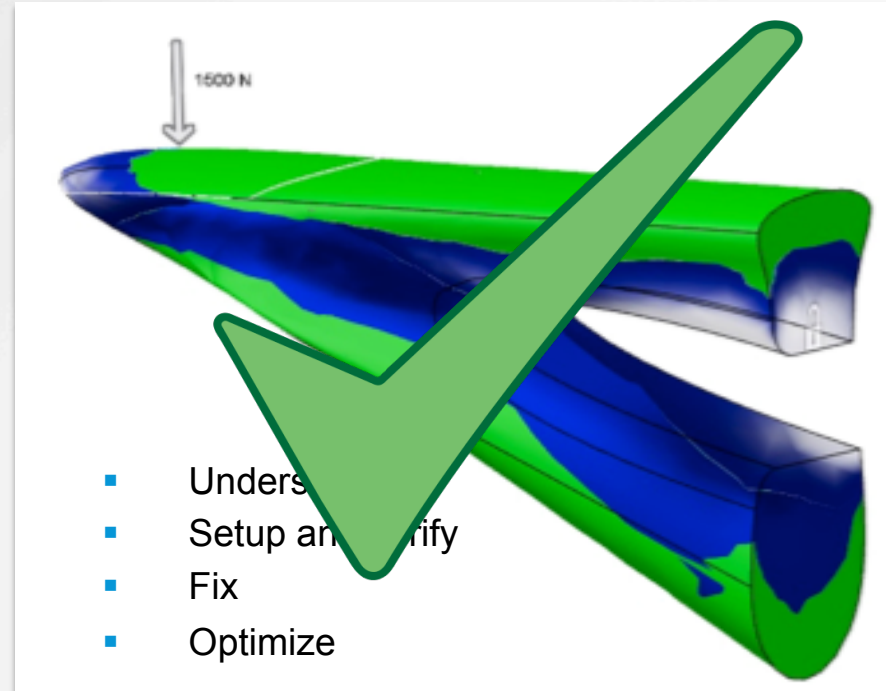


Bolted Connection

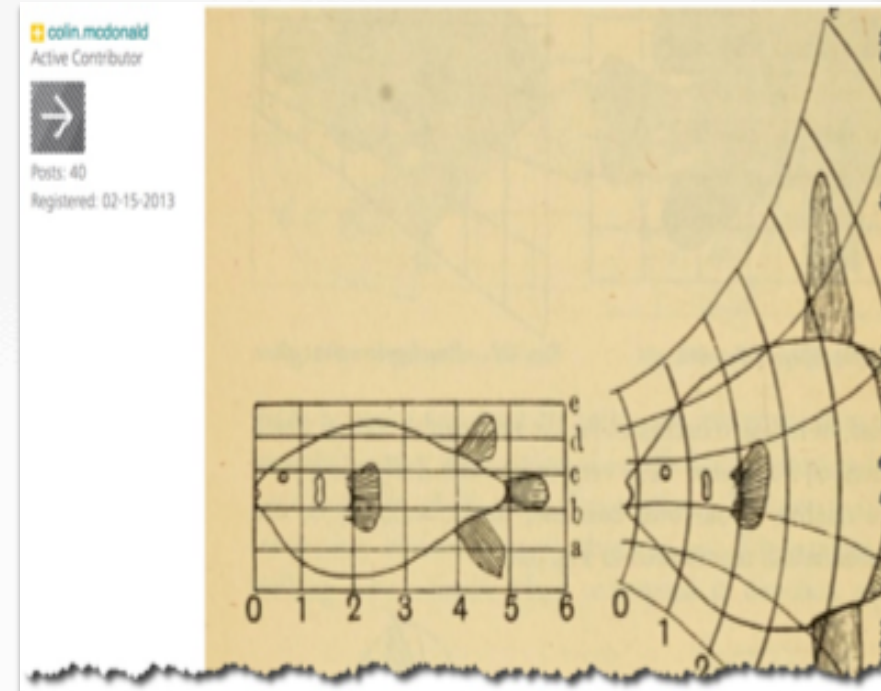


Key Learning Objectives

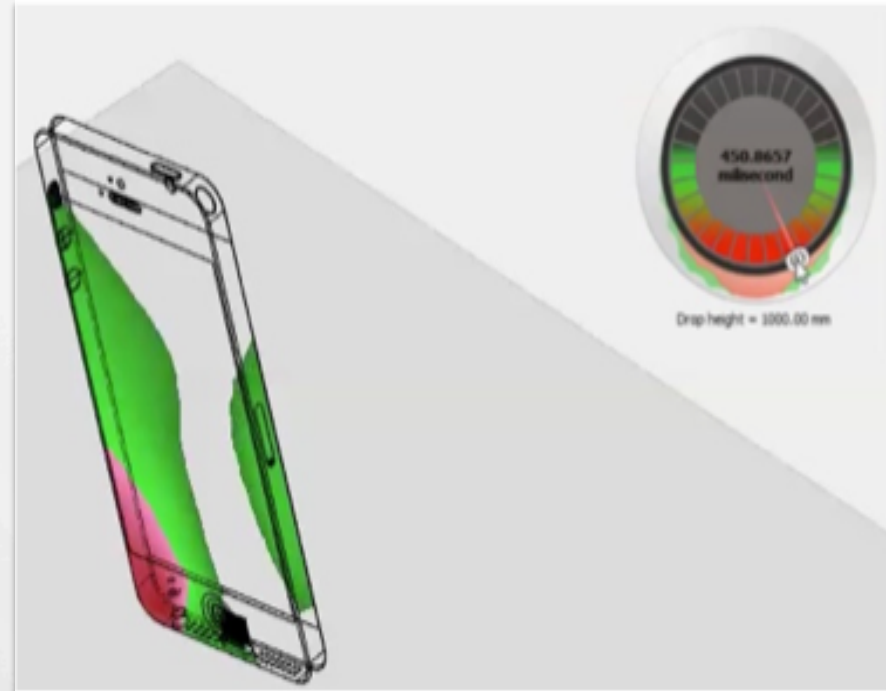
Simulation for Designers



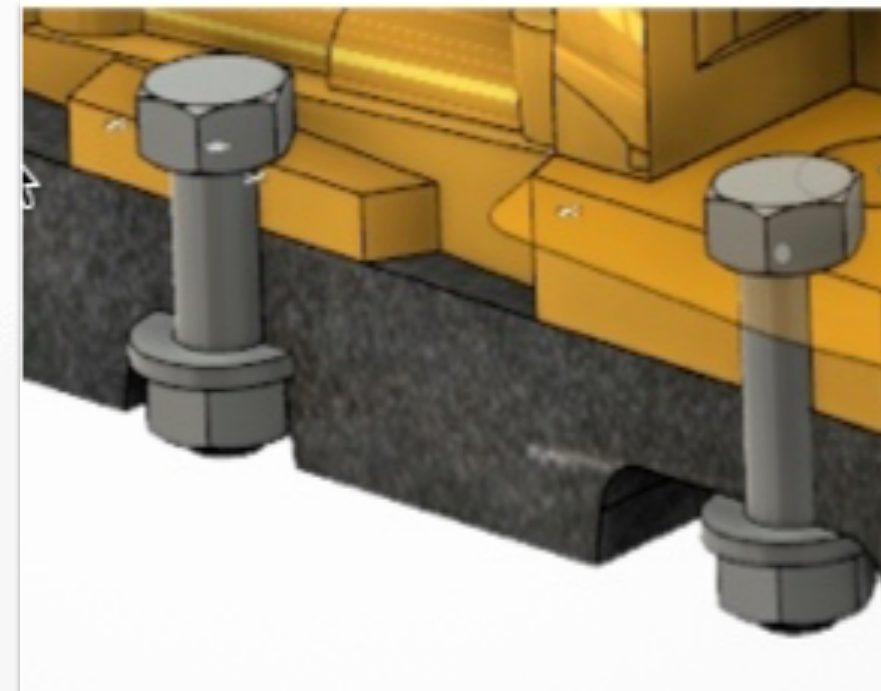
Autodesk Community



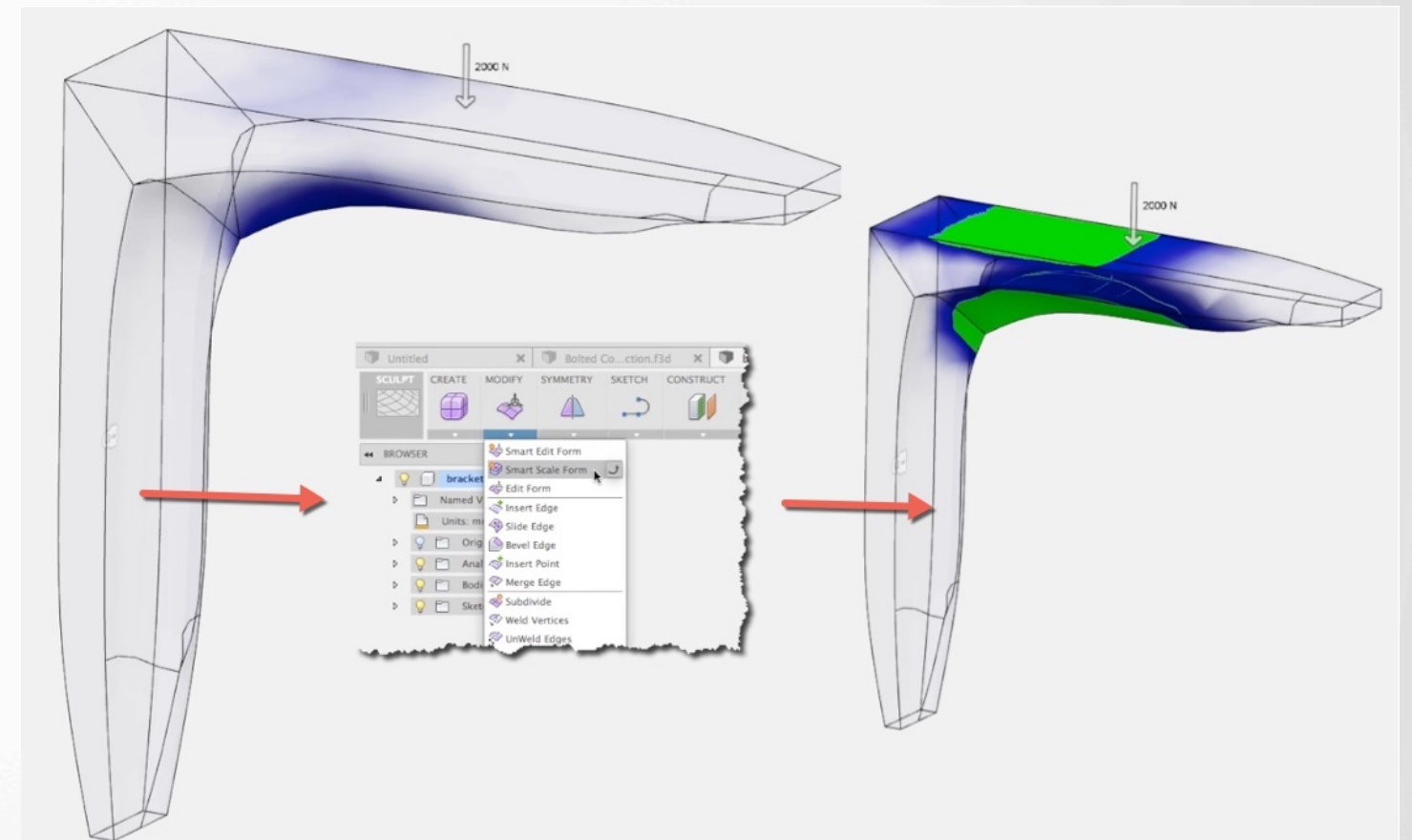
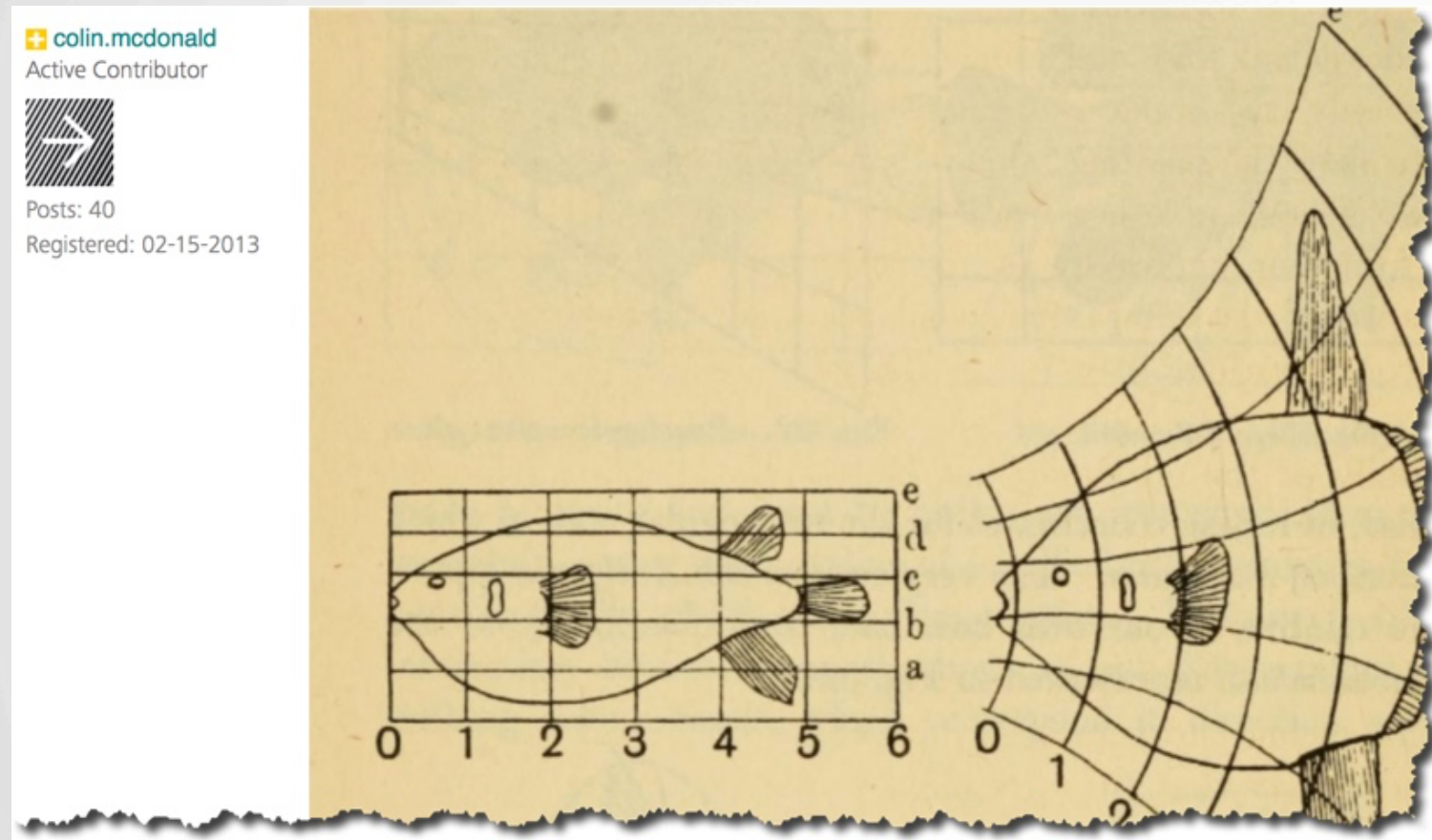
Drop Test



Bolted Connection



Smart Scale Form

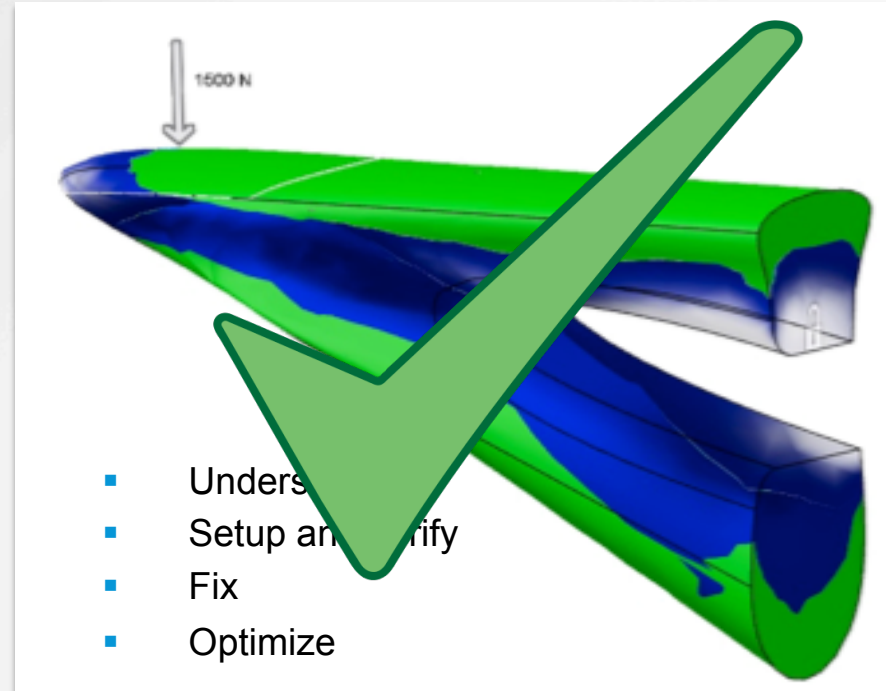




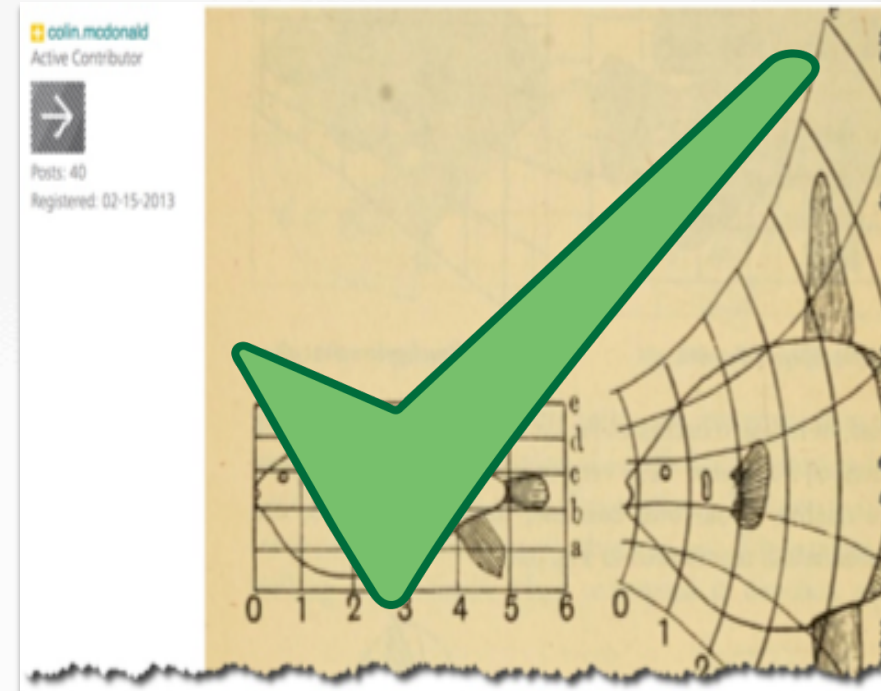
Questions?

Key Learning Objectives

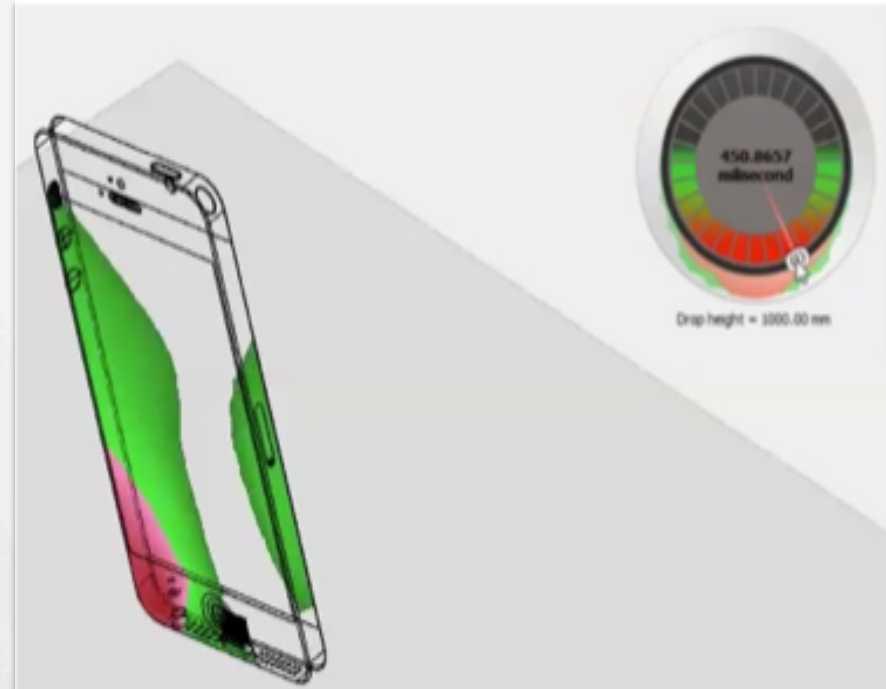
Simulation for Designers



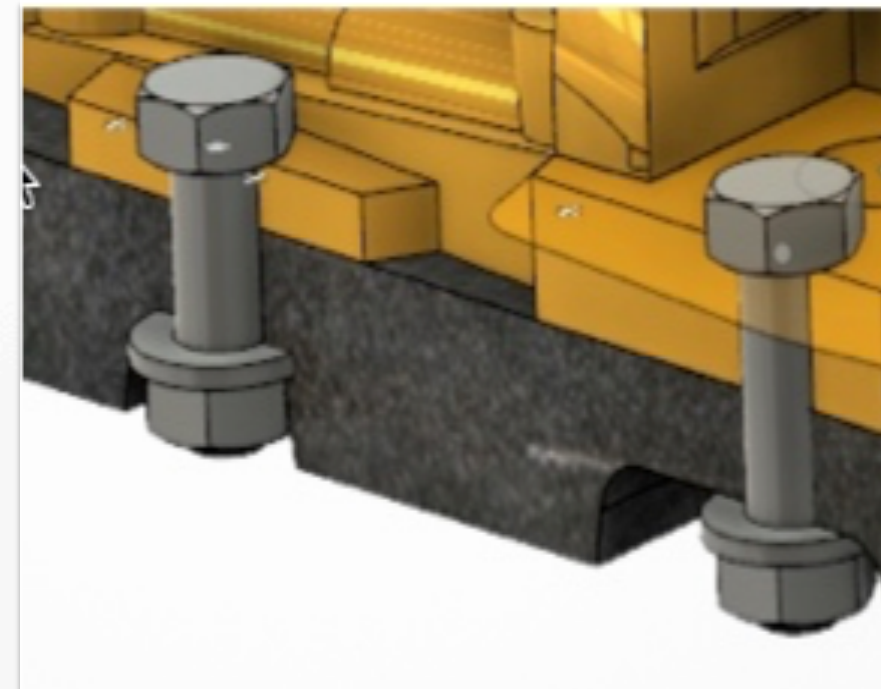
Autodesk Community



Drop Test

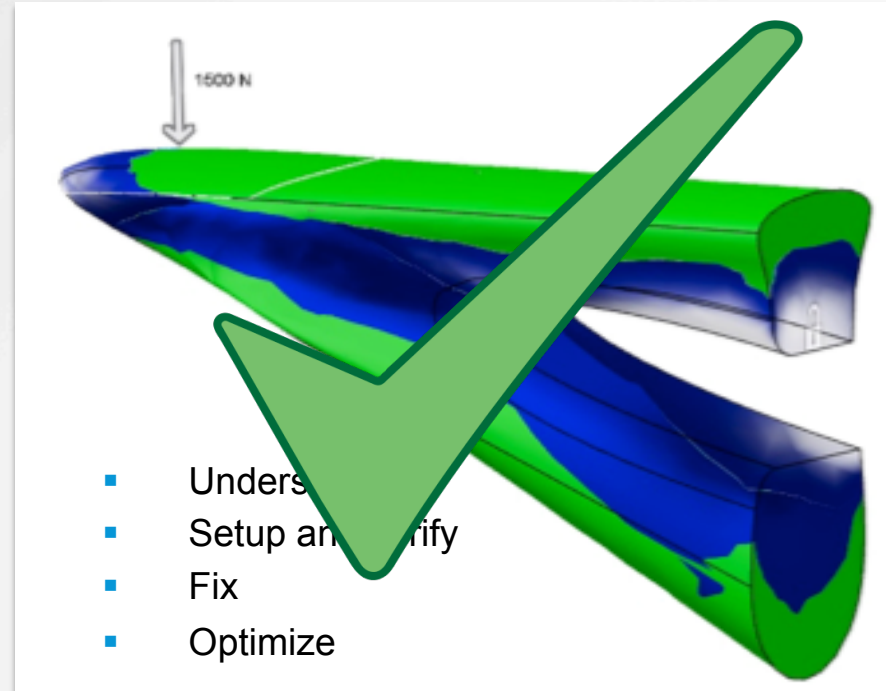


Bolted Connection

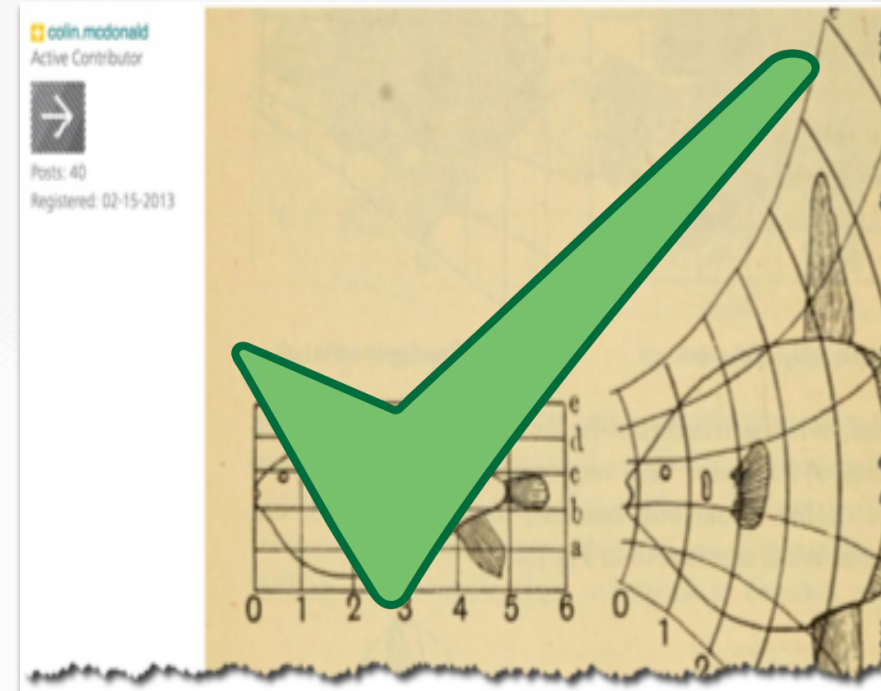


Key Learning Objectives

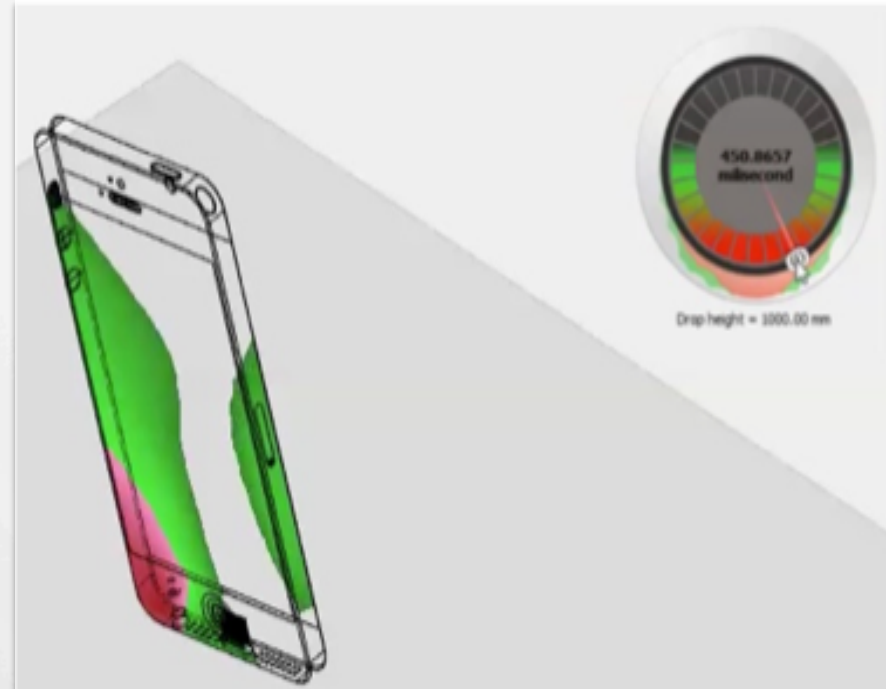
Simulation for Designers



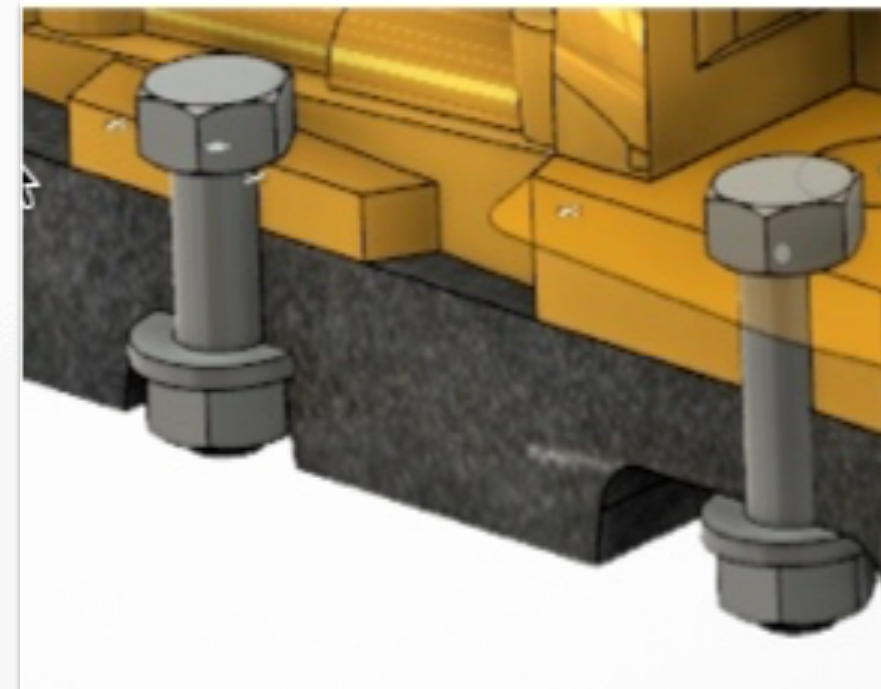
Autodesk Community



Drop Test



Bolted Connection

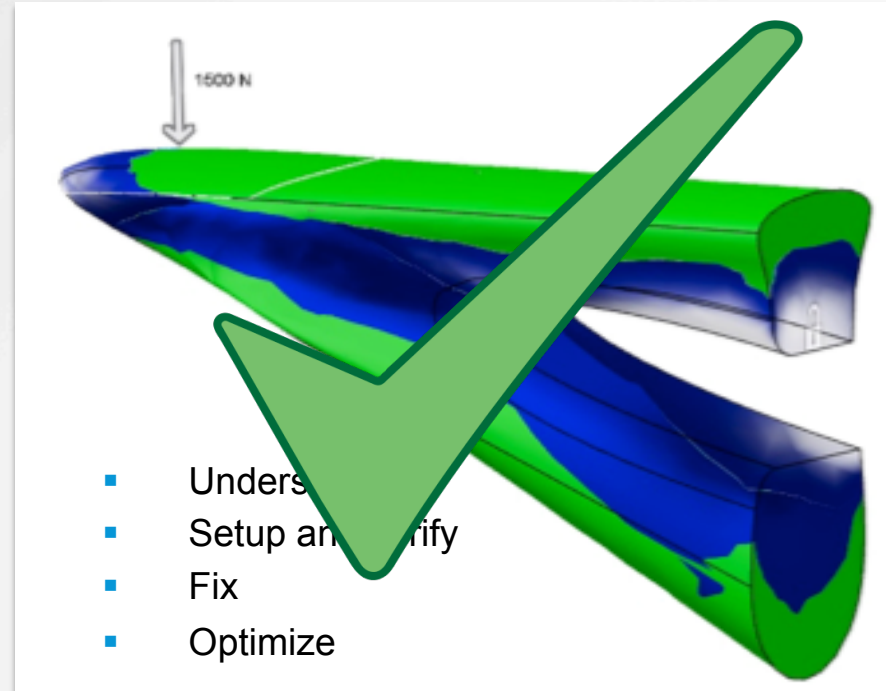




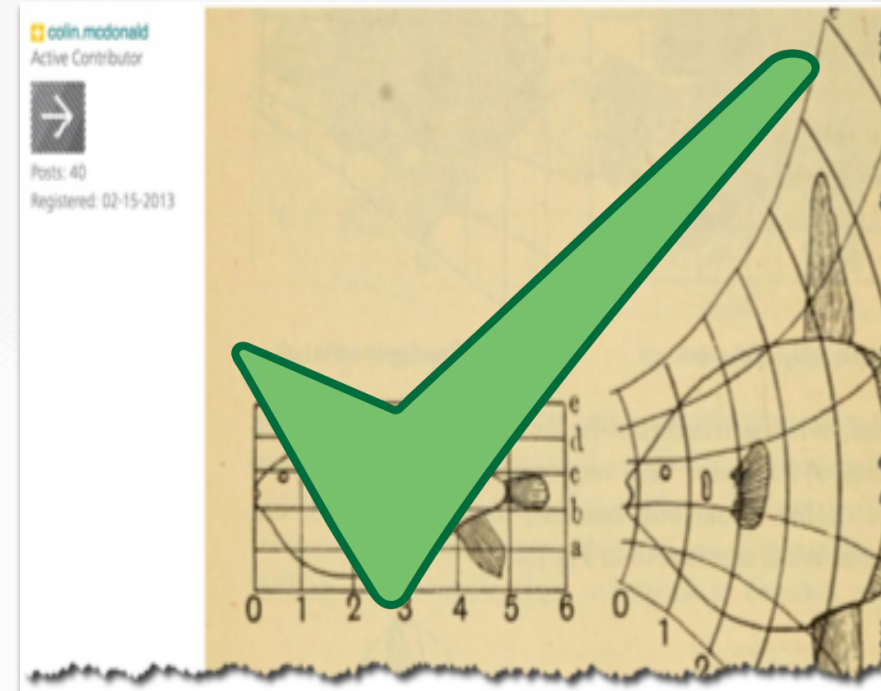
Questions?

Key Learning Objectives

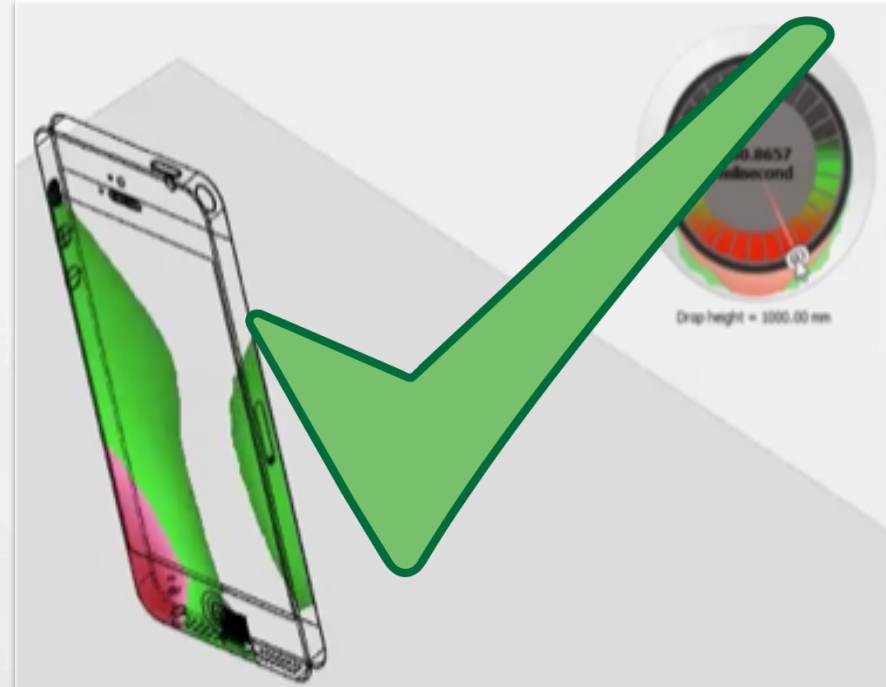
Simulation for Designers



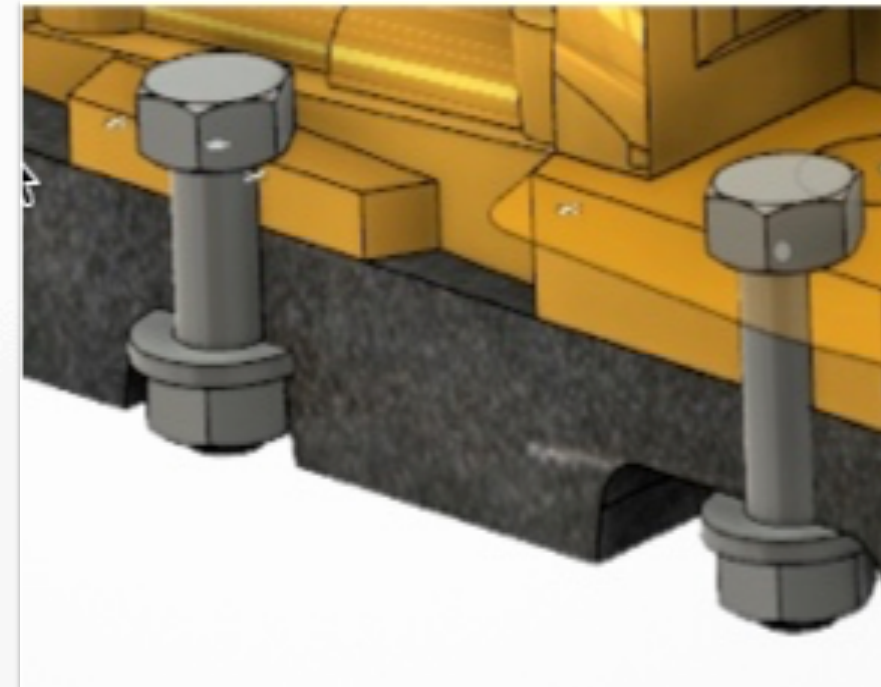
Autodesk Community



Drop Test

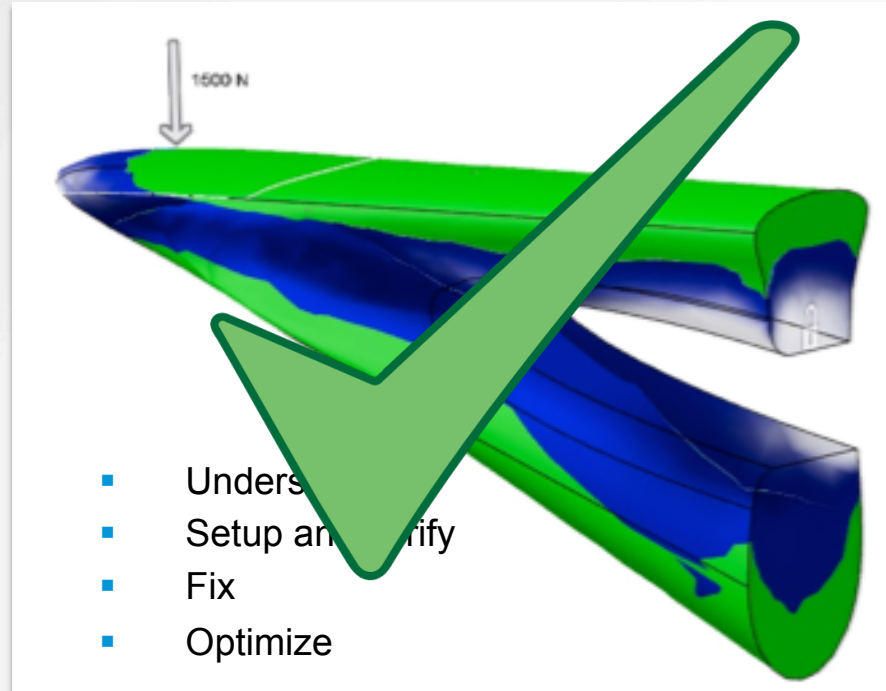


Bolted Connection

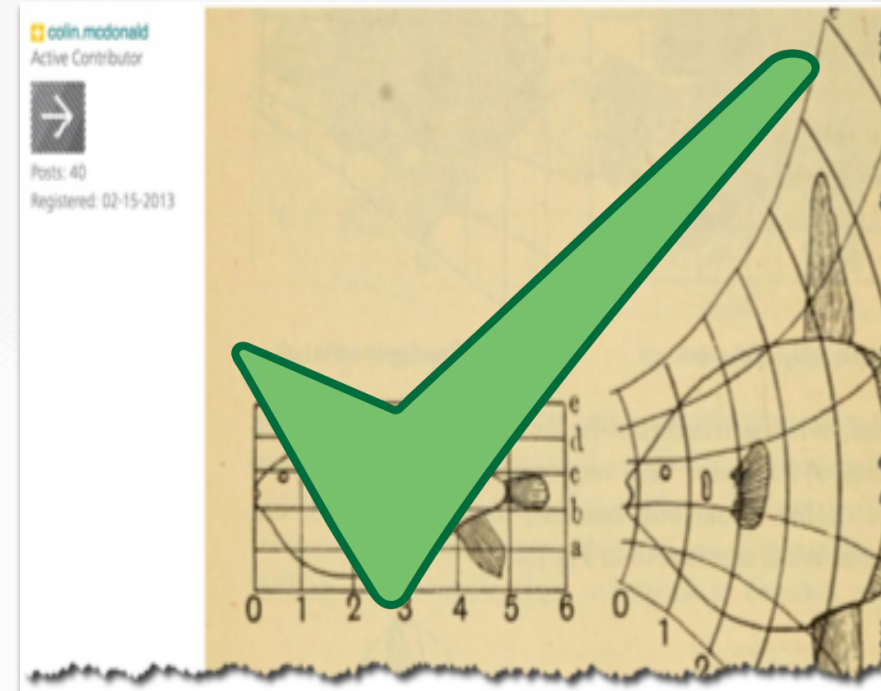


Key Learning Objectives

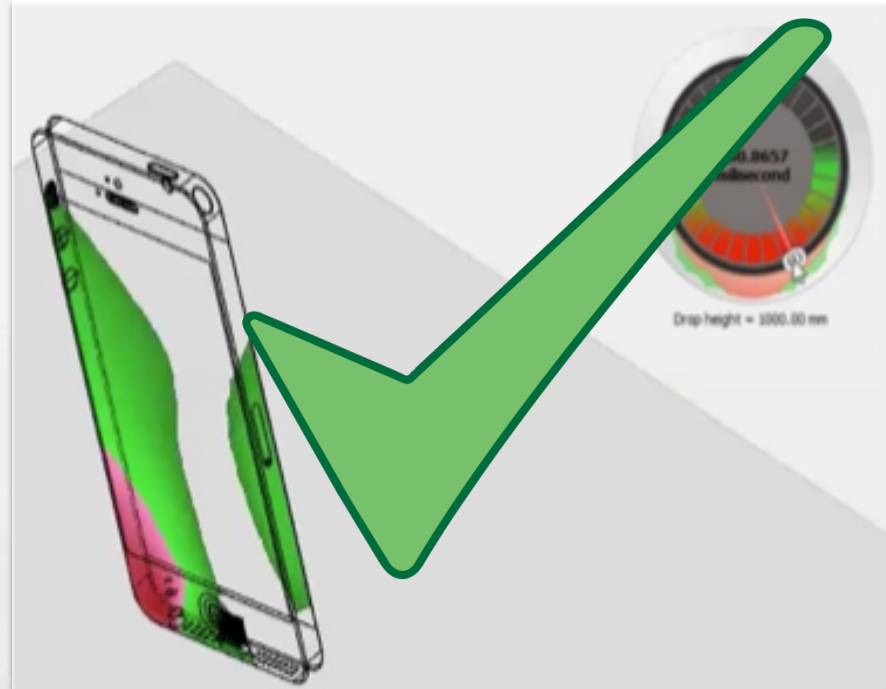
Simulation for Designers



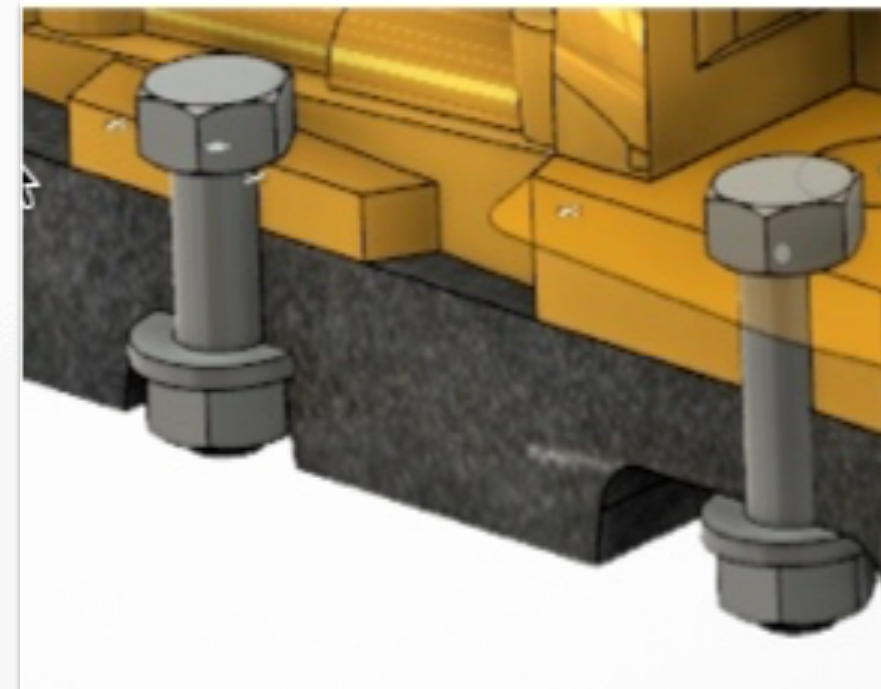
Autodesk Community



Drop Test



Bolted Connection

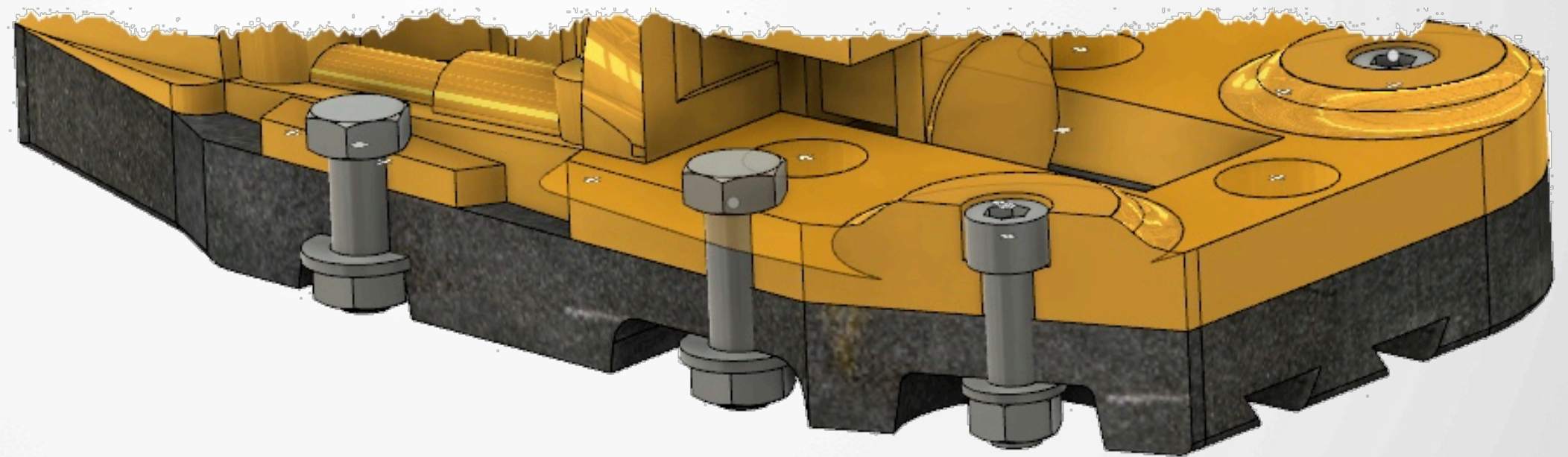


Bolted Connection for Fusion

Modeling Bolted Connection is one of the most common time consuming tasks.

Learn how to make bolted connection in seconds rather than minutes.

- 1-Click Creation
- Diameter change
- Topology change

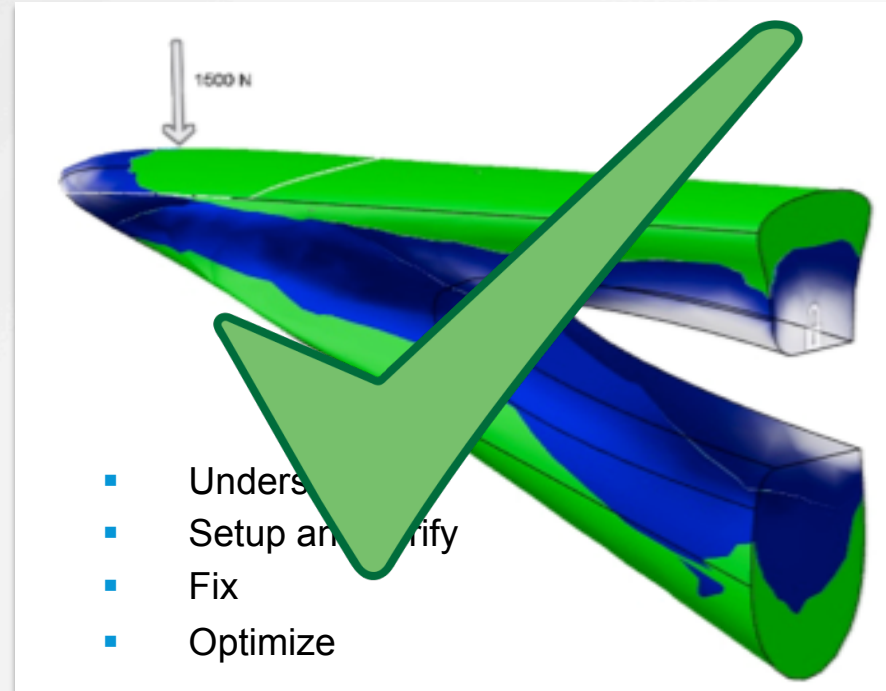




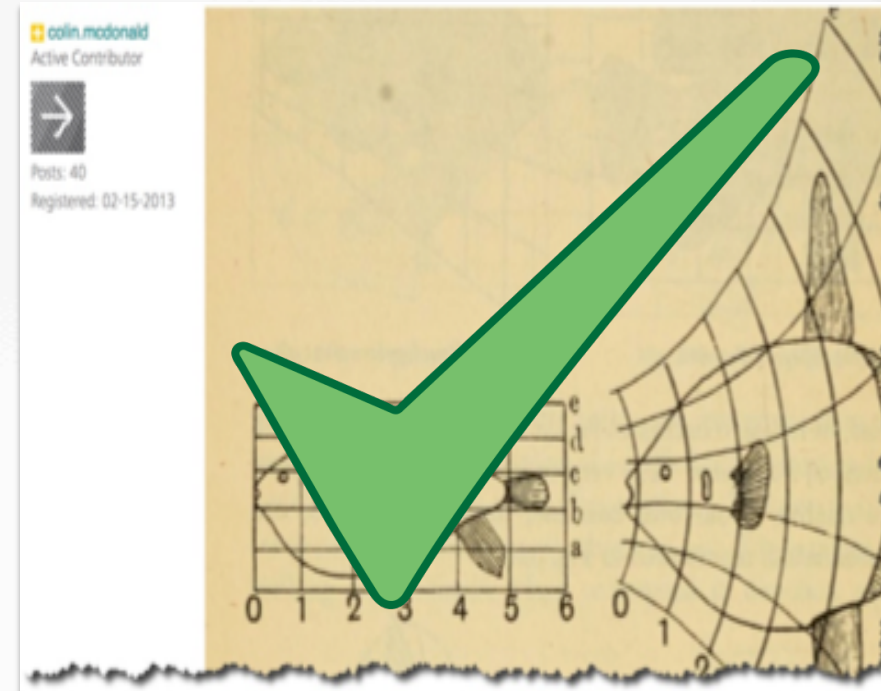
Questions?

Key Learning Objectives

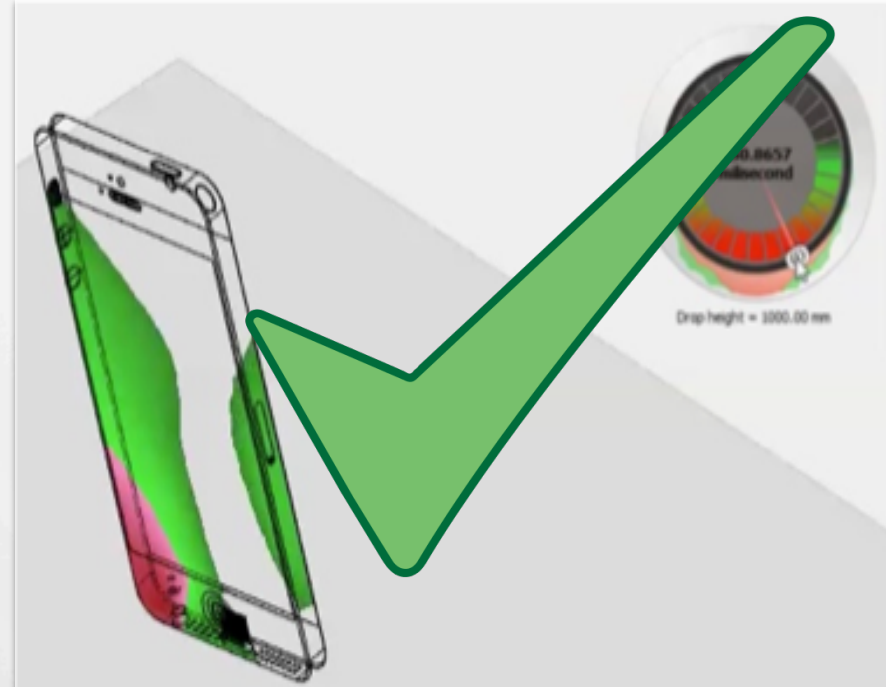
Simulation for Designers



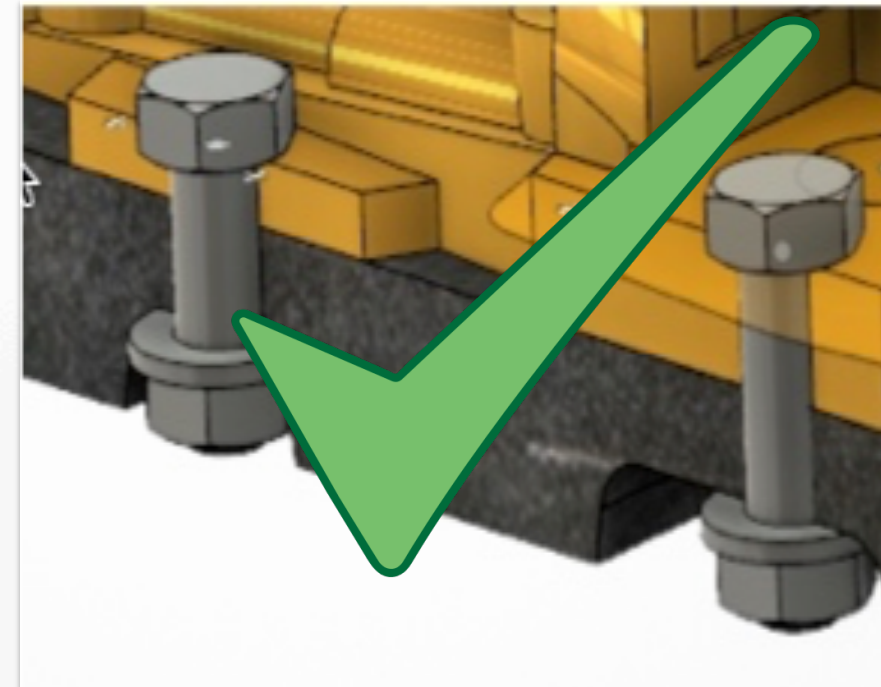
Autodesk Community



Drop Test



Bolted Connection



Session Feedback

- Via the Survey Stations, email or mobile device
- AU 2014 passes given out each day!
- Best to do it right after the session
- Instructors see results in real-time







Students, educators, and schools now have

FREE access to Autodesk design software & apps.

Download at www.autodesk.com/education



Earn your professional Autodesk Certification at AU

Visit the [AU Certification Lab](#)